

## INTERNATIONAL SEARCH REPORT

International application No. PCT/NO 01/00082
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## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: C07C 57/03, C07C 57/18, C07C 321/18, A61K 31/20, A61K 31/201, A61P 3/00, A61P 5/50, A61P 9/10, A61P 9/12

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: C07C, A61K, A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## WPI DATA, EPO-INTERNAL

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0345038 A2 (NORSK HYDRO A.S.), 6 December 1989 (06.12.89), page 3 - page 4, abstract, examples 1-5 --	1-7,9-12
X	WO 9703663 A1 (BERGE, ROLF ET AL), 6 February 1997 (06.02.97), page 6 - page 8, abstract, examples 1-2 --	1-7,9-12
X	WO 9958120 A1 (BERGE, ROLF), 18 November 1999 (18.11.99), page 6, line 5 - line 15, abstract, experiments, p. 9-17 --	1-7,9-12

Further documents are listed in the continuation of Box C.

See patent family annex.

• Special categories of cited documents	
"A" document defining the general state of the art which is not considered to be of particular relevance	"I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

18 June 2001

Date of mailing of the international search report

19-06-2001

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 9958121 A1 (THIA MEDICA AS), 18 November 1999 (18.11.99), page 22, abstract, table --	1-7,9-12
X	WO 9958122 A1 (THIA MEDICA AS), 18 November 1999 (18.11.99), page 19, abstract, table --	1-7,9-12
X	WO 9958123 A2 (THIA MEDICA AS), 18 November 1999 (18.11.99), page 15, abstract, table --	1-7,9-12
X	WO 9611908 A1 (PEPTIDE TECHNOLOGY LIMITED ET AL), 25 April 1996 (25.04.96), page 35, claim 18, abstract, examples, p 16-26 --	1-7
X	EP 0342115 A1 (CENTRE INTERNATIONAL DE RECHERCHES DERMATOLOGIQUES C.I.R.D.), 15 November 1989 (15.11.89), page 10 - page 17, abstract, examples --	1-7
X	EP 0622370 A2 (ROUSSEL-UCLAF), 2 November 1994 (02.11.94), page 12, line 45 - page 13, line 7 --	1-7
X	US 3910790 A (KARL LOHMER ET AL), 7 October 1975 (07.10.75), table 4, compound 31 --	1-7
X	J. Org. Chem., Volume 36, No 15, 1971, Kikumasa Sato et al, "A Synthesis of Dihydrothiopyran-3-ones. The Intramolecular Cyclization of Allylthioglycolic Acid Chlorides", page 2077 - page 2080, compound 3a-d --	1-7

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International application No.
PCT/NO 01/00082

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	J. CHEM. RESEARCH(S), 1990, Makoto Yamamoto et al, "Cyclisation of Alkynecarboxylic Acids: Synthesis and Reactions of 6-Methylene-1,4-oxathian-2-ones and Their 4,4-Dioxides", page 12-13, compound 3a-3e --	1-7
X	J.CHEM.RESEARCH (M), 1990, 0273-0281, compound 3a-e --	1-7
X	J. Chem. Soc. Perkin Trans.1, 1999, Teresa M.V.D. Pinho e Melo et al, "Intramolecular dipolar cyclo-addition reaction of 5H,7H-thiazolo(3,4-c)oxazol-4-1-olates: synthesis of chiral 1H-pyrrolo(1,2-c) thiazole derivaties", page 1219 - page 1223, see page 1221 --	1-7
P,X	EP 1044966 A1 (L'OREAL), 18 October 2000 (18.10.00) --	1-7
A	Biochemical Pharmacology, Volume 51, 1996, Pengfei Wu et al, "Effects of Chain Length and Sulphur Position of Thia Fatty Acids on Their Incorporation into Phospholipids in 7800 C1 Hepatoma Cells and Isolated Rat Hepatocytes, and Their Effects on Fatty Acid Composition of ....." page 751 - page 758 -- -----	1-12

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**Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.: **12**  
because they relate to subject matter not required to be searched by this Authority, namely:  
**See extra sheet**
2.  Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

1.  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

The additional search fees were accompanied by the applicant's protest.  
 No protest accompanied the payment of additional search fees.

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Claim 12 relate to a method of treatment of the human or animal body by surgery or by therapy/a diagnostic methods practised on the human or animal body/ Rule. 39.1.(iv). Nevertheless, a search has been executed for this claim. The search has been based on the alleged effects of the compound(s)/composition(s).

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

28/05/01

International application No.  
PCT/NO 01/00082

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
EP	0345038	A2	06/12/89	SE AT CA DE DK ES GB US	0345038 T3 96664 T 1329550 A 68910386 D,T 267689 A 2059749 T 8813012 D 5093365 A 15/11/93 17/05/94 09/06/94 03/12/89 16/11/94 00/00/00 03/03/92
WO	9703663	A1	06/02/97	AU CA EP JP NO US	4272696 A 2226871 A 0840604 A 11514339 T 952796 D 6046237 A 18/02/97 06/02/97 13/05/98 07/12/99 00/00/00 04/04/00
WO	9958120	A1	18/11/99	AU AU AU AU EP EP EP NO NO NO WO WO WO	4936699 A 4936799 A 5451799 A 7240398 A 1075258 A 1075259 A 1075260 A 20005461 A 20005462 A 20005463 A 9958121 A 9958122 A 9958123 A 29/11/99 29/11/99 29/11/99 29/11/99 14/02/01 14/02/01 14/02/01 08/01/01 08/01/01 08/01/01 18/11/99 18/11/99 18/11/99
WO	9958121	A1	18/11/99	AU AU AU AU EP EP EP NO NO NO WO WO WO	4936699 A 4936799 A 5451799 A 7240398 A 1075258 A 1075259 A 1075260 A 20005461 A 20005462 A 20005463 A 9958120 A 9958122 A 9958123 A 29/11/99 29/11/99 29/11/99 29/11/99 14/02/01 14/02/01 14/02/01 08/01/01 08/01/01 08/01/01 18/11/99 18/11/99 18/11/99

## INTERNATIONAL SEARCH REPORT

Information on patent family members

28/05/01

International application No.  
PCT/NO 01/00082

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9958122 A1	18/11/99	AU 4936699 A AU 4936799 A AU 5451799 A AU 7240398 A EP 1075258 A EP 1075259 A EP 1075260 A NO 20005461 A NO 20005462 A NO 20005463 A WO 9958120 A WO 9958121 A WO 9958123 A	29/11/99 29/11/99 29/11/99 29/11/99 14/02/01 14/02/01 14/02/01 08/01/01 08/01/01 08/01/01 18/11/99 18/11/99 18/11/99
WO 9958123 A2	18/11/99	AU 4936699 A AU 4936799 A AU 5451799 A AU 7240398 A EP 1075258 A EP 1075259 A EP 1075260 A NO 20005461 A NO 20005462 A NO 20005463 A WO 9958120 A WO 9958121 A WO 9958122 A	29/11/99 29/11/99 29/11/99 29/11/99 14/02/01 14/02/01 14/02/01 08/01/01 08/01/01 08/01/01 18/11/99 18/11/99 18/11/99
WO 9611908 A1	25/04/96	AU 698476 B AU 3645195 A AU PM878194 D CA 2202503 A EP 0869941 A JP 10507179 T AU PM906694 D	29/10/98 06/05/96 00/00/00 25/04/96 14/10/98 14/07/98 00/00/00
EP 0342115 A1	15/11/89	AT 80384 T AU 623649 B AU 3452289 A CA 1328465 A DE 68902772 D, T DK 227789 A FR 2631339 A, B JP 2117654 A JP 2763916 B PT 90492 A, B US 5151534 A US 5268494 A ZA 8903474 A	15/09/92 21/05/92 16/11/89 12/04/94 21/01/93 11/11/89 17/11/89 02/05/90 11/06/98 30/11/89 29/09/92 07/12/93 30/01/91

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

28/05/01

International application No.  
PCT/NO 01/00082

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0622370 A2	02/11/94	AP 75 A 05/03/90 AP 8800096 D 00/00/00 AT 128711 T 15/10/95 AU 611702 B 20/06/91 AU 1977688 A 27/01/89 BR 8803652 A 14/02/89 CN 1030759 A 01/02/89 DD 290195 A 23/05/91 DE 3854544 D 00/00/00 DK 167188 B 13/09/93 DK 407188 A 23/01/89 EG 18921 A 30/10/94 EP 0300797 A,B 25/01/89 EP 0545892 A 09/06/93 FI 883453 A 23/01/89 GB 8717274 D 00/00/00 GR 3018584 T 30/04/96 HU 209128 B 28/03/94 IL 87183 A 26/05/95 JP 1047787 A 22/02/89 MC 1956 A 30/06/89 NZ 225508 A 28/04/92 PL 273850 A 22/01/90 PL 278571 A 30/10/89 PT 88053 A,B 30/06/89 RU 2002751 C 15/11/93 RU 2034847 C 10/05/95 RU 2056107 C 20/03/96 RU 2063972 C 20/07/96 SU 1831482 A 30/07/93 TR 25921 A 17/09/93 US 5116862 A 26/05/92 ZA 8805306 A 28/03/90 GB 8723488 D 00/00/00 GB 8809851 D 00/00/00	
US 3910790 A	07/10/75	BE 809894 A 18/07/74 CA 1011980 A 14/06/77 CH 598623 A 12/05/78 DE 2304321 A,B 08/08/74 FR 2215647 A 23/08/74 GB 1429614 A 24/03/76 IT 1002786 B 20/05/76 JP 49107537 A 12/10/74	
EP 1044966 A1	18/10/00	AU 2245900 A 19/10/00 CN 1273239 A 15/11/00 FR 2792312 A 20/10/00 JP 2000344736 A 12/12/00 NO 20001905 A 16/10/00	